

# Biodiversity of Forest Plants of Powdery Mildew on Jalgaon, Maharashtra, India

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## ABSTRACT

Present Paper Deals with the study of Powdery mildew disease have been known to various crops every year throughout India and across the world keeping this in view, a through survey was carried out in Jalgaon district (M.S.) Powdery mildew fungi can grow superficially on leaves. Stem petal, sepal and fruits of host plants and at severity of infection causes morphological, anatomical and physiological damages of plants.

**Key words:** - Forest Plant, family, Powdery mildew fungi.

## INTRODUCTION

Powdery mildew disease is a common occurrence on variety of cultivated and wild plants across the world causing significant damage both indoor and outdoor cultivated plants. The fungal order to eryliphales plant pathogens have a worldwide. Powdery mildew on about ten thousand angiosperm plants (Amano 1986, Branu 1988). The biodiversity of eryliphales is less explored in tropical and subtropical region compared with temperate regions of Northern Hemisphere (Hitata 1976) this study revealed that there are still many undescribed and unique powdery mildew species in this region. In this research article diversity of powdery mildew fungi is reported on some wild and cultivated plants.

## MATERIAL METHODS

Survey was carried out at different localities in of Jalgaon district of Maharashtra (India). The collected samples were packed separately in sterilized polythene bags and noted with their locality, host name, date of collection, time and brought to laboratory for further analysis. Powdery mildew fungi were identified by macroscopic and microscope analysis of infected plant material. The leaf scraping was taken and slides were prepared by using cotton blue stain and lactophenol as mounting medium.

Slides were observed under light microscope and micro-photography was done. Powdery mildew fungal genera were identified on the basis of morphological characters of conidia and conidiophores and by using standard literature (Hosagoudar and Agrawal, 2009 Paul and Thakur 2006)

The interesting results were noticed from present investigation. Total 16 forest plant species were noticed as the hosts of powdery mildew fungi. Present study reported tremendous diversity of host plants. *Aegle marmelos* *Acacia nilotica*, *Kirganellia reticulate* and *Baliospermum montanum* infected on *Oidium* sp Link Ex.Fr.

## RESULTS & DISCUSSION

Sr. No	Name of Host plant	Host Plant family	Local Name in Maharashtra	Powdery mildew fungus
01	<i>Aegle marmelos</i>	Rutaceae	Bel	<i>Oidium</i> sp Link Ex.Fr
02	<i>Ailanthus excels</i>	Simaroubaceae	Maharukh	<i>Oidium ailanthic</i>
03	<i>Azadirachta indica</i>	Meliaceae	Neem	<i>Oidium azadirachatae</i>
04	<i>Butea monosperma</i>	Fabaceae	Palas	<i>Erysiphe polygoni</i>
05	<i>Dalbergia sissoo</i>	Fabaceae	Sheesam	<i>Phyllactina dalbergiae</i>
06	<i>Acacia nilotica</i>	Mimosaceae	Babhul	<i>Oidium</i> spLink Ex.Fr
07	<i>Acacia pennata</i>	Mimosaceae	-	<i>Erysiphe acacia</i>
08	<i>Lawsonia innermis</i>	Lythraceae	Mehndi	<i>Ovulariopsis lawsiniae</i>
09	<i>Ixora paveta</i>	Rubiaceae	Lokhandi	<i>Erysiphe cichoracearum</i>
10	<i>Bidens biternata</i>	Asteraceae (Compositae)	-	<i>Sphaerotheca fuliginea</i>
11	<i>Hemidesmus indicus</i>	Periplocaceae	Anantmul	<i>Oidium hemidesmis</i>
12	<i>Cordia rothii</i>	Ehretiaceae	Gondani	<i>Phyllactinia thirumalachari</i>
13	<i>Tectona grandis</i>	Verbenaceae	Sagwan	<i>Uncinulla tctonae</i>
14	<i>Santalum album</i>	Santalaceae	Chandan	<i>Oidium santalacearum</i>
15	<i>Kirganellia reticulate</i>	Euphorbiaceae	Kanguni	<i>Oidium</i> spLink Ex.Fr
16	<i>Baliospermum montanum</i>	Euphorbiaceae	Danti	<i>Oidium</i> spLink Ex.Fr

**Conflicts of interest:** The authors stated that no conflicts of interest.

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